

## **Neurobiological Sequelae of Witnessing Stressful Events in Adult Mice**

### ***Supplemental Information***

#### **Supplemental Methods & Materials**

##### **Animals**

Mice were male, fed ad libitum, allowed a 1-week habituation period before experimental manipulation, and housed at 23-25°C on a 12 h light/dark cycle (lights on at 7 AM). Eight week-old male C57BL/6J mice (Jackson Labs, Bar Harbor, Maine), and CD1 retired breeders (Charles River), were used in this study. Mice were housed in clear polypropylene boxes containing wood shavings, C57BL/6J (four per cage prior to stress, singly housed following stress) and CD1 (one per cage). Experiments were conducted in compliance with the Guidelines for the Care and Use of Laboratory Animals (1), and approved by the Florida State University Animal Care and Use Committee.

##### **Corticosterone Enzyme Immuno Assay**

One group of mice was sacrificed 40 min following a single session of control stress (CON), emotional stress (ES), or physical stress (PS). A second group was sacrificed 24 h after 10 sessions of CON, ES, or PS. The third group was exposed to CON, ES, or PS, and then sacrificed 40 min after the forced swim test (FST). Trunk blood from each animal was individually collected in EDTA lined tubes and kept on ice until use. Whole blood samples were centrifuged at 1500 X g for 30 min at 4°C. Serum supernatant was decanted for analysis with the corticosterone enzyme immuno assay per manufacturer's instructions (Assay Designs). Briefly, serum was diluted to 10% using the provided buffer and added to the wells of an immuno-lined 96-well plate and allowed to incubate for 2 h with provided antibodies. The plate was washed with a provided wash buffer, developed, and optical density was read using a 96-well plate reader (Biotek). Serum corticosterone was calculated by comparing these values to optical density values obtained from corticosterone standards.

### **Social Interaction Test**

The social interaction behavioral assay is a test of social avoidance. Briefly, this is a two-session test. In the first session, a mouse is allowed to explore an open field arena (40 cm x 40 cm) for 2.5 min (see Figure 2). Along one side of the arena is a wire mesh cage that remains empty during the first trial (no target). The mouse is then removed and a novel CD-1 male mouse is placed into the wire mesh cage. The test mouse is placed back into the arena and the amount of time it spends in the “interaction zone” (an 8 cm wide corridor surrounding the cage) is measured during the 2.5 min trial (target present). Socially defeated mice explore the interaction zone significantly less when another mouse is present (2). Interestingly, chronic antidepressant treatment alleviates this avoidant behavioral phenotype, but acute treatment does not (3, 4). This makes the social defeat/interaction test a valid model of antidepressant efficacy and thus a good model to test for depression-like affect, as well as sensitivity to stress-related stimuli (3, 5).

### **Forced Swim Test**

The FST is a classic model of depression-like behavior with a high degree of predictive validity (6-8). It was performed according to previously described methods with some modifications (9, 10). Mice were placed individually into 5L beakers (27 cm x 18 cm) containing 4L of water ( $23 \pm 1^\circ\text{C}$ ) for 6 min. During this time the mouse adopts an immobile posture, characterized by motionless floating and the cessation of struggling. The latency to adopt this posture and total time spent immobile were recorded. (6, 8).

### **Sucrose Preference**

The sucrose preference assay has been used extensively to assess motivational state in rodents, including stress-induced anhedonia (11-15). This test consists of a two-bottle choice paradigm in which mice are given the choice between consuming water and a 1.0% solution of sucrose. The preference for sucrose over water is used as a measure for rodents' sensitivity to a natural reward. Thus, anhedonia is revealed by a reduction in sucrose preference (16, 17).

### **Elevated Plus-Maze (EPM)**

The EPM is a classic test of anxiety-like pharmacologic activity in rodents (18). The apparatus consists of two perpendicular intersecting runways, shaped like a plus sign. One runway has no walls (open arms) while the other arm has tall walls (closed arms). The runways are 6 cm wide, 33 cm long and the closed walls are 25 cm tall. The runways are 50 cm from the floor. Mice are placed into the closed arm and allowed to explore for 5 min. Mice tend to prefer the safety of the closed arms, but will eventually begin to explore the open arms. Anxiolytic drugs, such as diazepam, increase time spent in the open arms and decrease time spent in the closed arms (19). Thus, decreased total time spent in the open arms is interpreted as increased anxiety-like behavior.

### **Fluoxetine Reversal**

In order to demonstrate predictive validity, mice were exposed to ten days of ES, PS, or CON stress. Reference levels of social interaction were assessed 24 h after the last stress session. Mice were then divided into acute or chronic treatment groups. Chronic treatment mice were given daily injections of fluoxetine (20 mg/kg), dissolved in water (20 mg/mL) or saline for 30 days. Mice assigned to acute treatment received a single fluoxetine injection 30 days after the last stress session. Twenty-four h after the last injection, the social interaction test was repeated.

### **Soiled Bedding Control**

In order to determine whether soiled bedding alone could induce social aversion, we exposed a separate group of C57BL/6J mice to either CON or “overnight” conditions. CON was performed as previously described. Mice assigned to the overnight condition were housed in the compartment adjacent to a CD1 mouse. Importantly, these mice did not “witness” the social defeat of a PS-mouse. Every 24 h for 10 days, the overnight mice were moved into the home cage of a novel CD-1 mouse. Twenty-four hours after day ten, CON and overnight mice were exposed to the social interaction test (see Figure S1F).

### **Transcriptome-Wide Analysis of Ventral Tegmental Area (VTA)**

Mice were used 24 h after the last stress session. Brains were dissected as previously described (20), and tissue punches (1.0 mm) were taken from the VTA. Total RNA was isolated using Trizol (Invitrogen, California). Four micrograms of total RNA was then used for messenger RNA (mRNA) library construction with the Illumina mRNA sample prep kit (cat#RS-100-0801). Briefly, the poly-A containing mRNA was purified using poly-T oligo-attached magnetic beads. The mRNA was fragmented into small pieces using divalent cations under heat. The cleaved RNA fragments were copied into first strand complementary DNA (cDNA) using reverse transcriptase and random primers. This was followed by second strand cDNA synthesis using DNA Polymerase I and RNaseH. These cDNA fragments were passed through an end repair process, the addition of a single 'A' base, and then ligation of the adapters. The products were gel purified and enriched with polymerase chain reaction (PCR) to create the final cDNA libraries. The library constructs were run on the bioanalyzer to verify cDNA size and concentration before sequencing. The sequencing was performed at Mount Sinai's core facility. An Illumina HiSeq2000 machine was used to obtain high-depth sequencing.

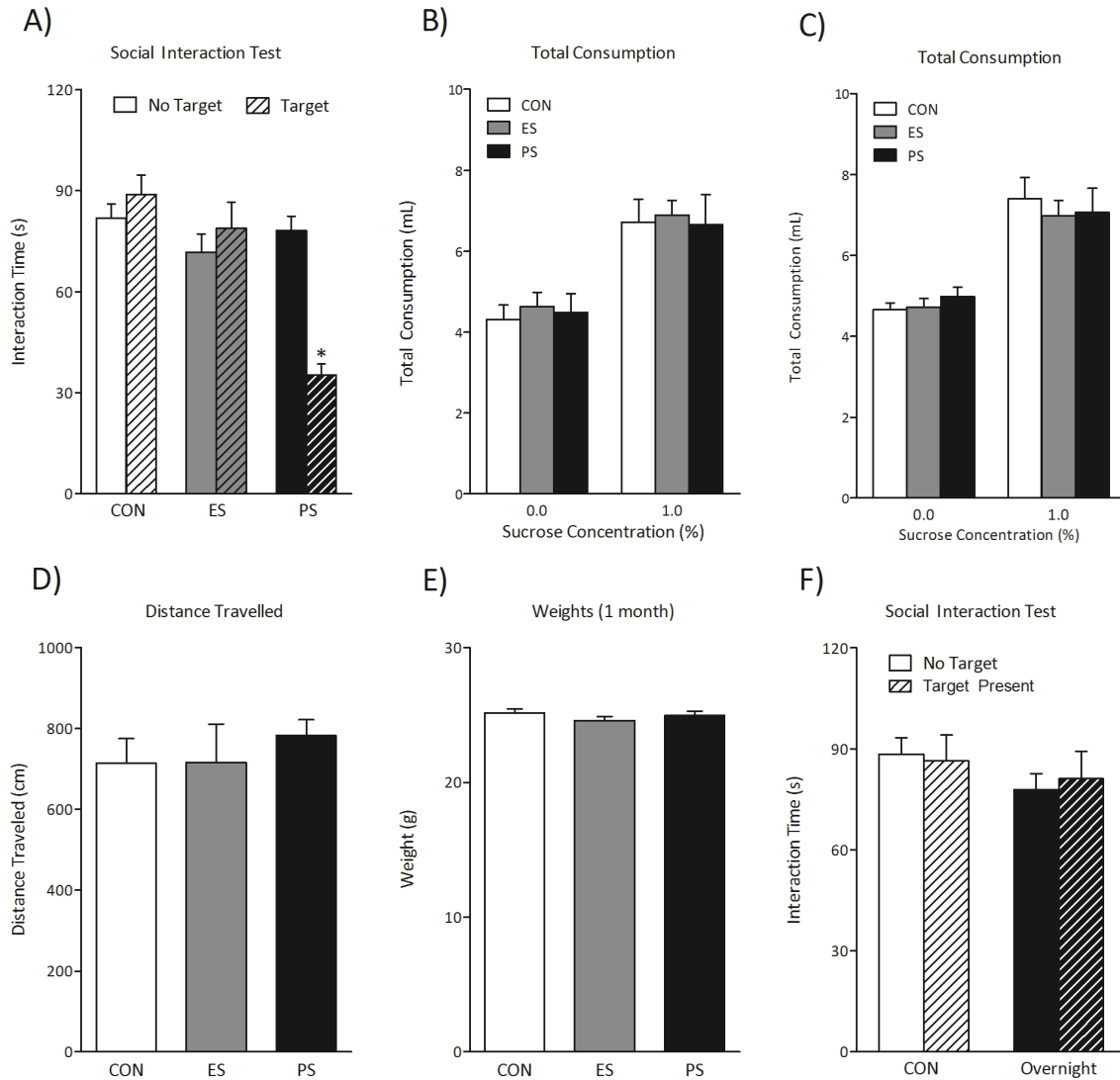
The short reads coming off the HiSeq2000 sequencing machine were ~100 bp in length. Some of them contain part of the adapter sequence if the fragments sequenced were shorter than 100 bp. To improve sensitivity in sequence alignment, the leftover adapter (AGATCGGAAGAGCGGTTCAGCAGGAATGCCGAGACCGATCTCGTATGCCGTCTTCTGCTTG) sequences were removed using the fastx toolbox ([http://hannonlab.cshl.edu/fastx\\_toolkit/index.html](http://hannonlab.cshl.edu/fastx_toolkit/index.html)). Any sequence shorter than 36 bp after clipping was discarded. Please see Table S1 for the number of short reads before and after adapter clipping. Sequence alignment was then performed for the short reads against a reference database (*Mus musculus* NCBI37.62) using Tophat (21). The number of short reads aligned with a Phred score of at least 20 is summarized in Table S1.

Isoform expression quantification and differential analysis were carried out using the Cufflinks pipeline (22). Sequencing bias was adjusted by the "-b" option and short reads with multiple hits were corrected by the "-u" option. The two stressed groups, i.e. ES and PS, were

compared with the control group to identify differentially expressed isoforms. A cutoff of false discovery rate <10% was chosen.

### **Quantitative PCR (qPCR)**

We used qPCR to validate results from the RNA-seq experiment, using the same cDNA. qPCRs were performed in triplicate using 96 well PCR plates and RealMasterMix (Eppendorf) with an Eppendorf MasterCycler Realplex<sup>2</sup> according to manufacturer's instructions. Threshold cycle [ $C(t)$ ] values were measured using the supplied software and analyzed with the  $\Delta\Delta C(t)$  method as described previously (23). Primer sequences are shown in Table S2.



**Figure S1.** Using opaque dividers during stress exposure blocked ES exposure from inducing social avoidance (**A**;  $n = 10$ ). Total fluid consumption was not affected by stress treatment either short- or long-term (**B**, **C**, *respectively*;  $n = 8$ ). Distance travelled in the social interaction test (no target) was not influenced by stress treatment (**D**;  $n = 12$ ). Weights did not differ 1 month after stress exposure (**E**;  $n = 12$ ). Social interaction did not differ 24 h following 10 days of overnight housing with CD1 mice, when compared to CON-exposed mice (**F**;  $n = 8$ ). CON, control; ES, emotional stress; PS, physical stress.

**Table S1.** Number of short reads before and after adapter clipping

<b>Sample name</b>	<b>#reads original</b>	<b>#reads kept</b>	<b>#reads aligned</b>
CON1.sequence.txt.gz	114511236	106072233	79492405
CON2.sequence.txt.gz	85170806	79643750	58220349
CON3.sequence.txt.gz	125441152	118524164	88240998
ES1.sequence.txt.gz	112013288	105606125	80263163
ES2.sequence.txt.gz	104878813	98953869	73329270
ES3.sequence.txt.gz	124804784	118559469	87790637
PS1.sequence.txt.gz	128884232	123045645	97200538
PS2.sequence.txt.gz	53044297	41089151	28958345
PS3.sequence.txt.gz	93527824	88552849	59427601

**Table S2.** Primer sequences

<b>Gene</b>	<b>Forward</b>	<b>Reverse</b>
<i>Cdh1</i>	CAGGTCTCCTCATGGCTTTGC	CTTCCGAAAAGAAGGCTGTCC
<i>Kcnh3</i>	CTGTGACCTCACGGGTTTCTC	GGGCCTTTCGGATCTGTTGG
<i>Map2k1</i>	AACGGTGGAGTGGTCTTCAAG	CGGATTGCGGGTTTGATCTC
<i>Pik3r2</i>	GGACAGTGAATGCTACAGTAAGC	CCTGCAACCTCTCGAAGTG
<i>Prkcd</i>	GCTCCCTGCAAGTTGAGGAC	ACACGGCCTTCATAGATGTGG
<i>Wnt9a</i>	ATGCTGGATGGGTCCCTTCT	ACTGCCTGTTAGCCCGAAGTA
<i>Shank3</i>	CCGGACCTGCAACAAACGA	GCGCGTCTTGAAGGCTATGAT

**Table S3.** Similarly Regulated Genes

Test ID	Gene Symbol	PS Fold Change	ES Fold Change	Interpretation
XLOC_029665	<i>1600016N20Rik</i>	1.68	2.01	Up in ES and PS
XLOC_000902	<i>1700007P06Rik</i>	1.80E+30	1.80E+30	Up in ES and PS
XLOC_034831	<i>1700010D01Rik</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_014076	<i>1700011I03Rik</i>	-1.08	-1.32	Down in ES and PS
XLOC_003028	<i>1700025N21Rik</i>	0.28	0.12	Up in ES and PS
XLOC_013310	<i>1700049J03Rik</i>	-1.80E+30	-0.21	Down in ES and PS
XLOC_014439	<i>1700066O22Rik,4930511M06Rik</i>	0.84	1.61	Up in ES and PS
XLOC_032382	<i>1700104A03Rik</i>	-1.80E+30	-0.44	Down in ES and PS
XLOC_023573	<i>1700112M01Rik</i>	-1.80E+30	-0.13	Down in ES and PS
XLOC_014521	<i>1700120E14Rik</i>	-0.86	-1.80E+30	Down in ES and PS
XLOC_022065	<i>2410114N07Rik</i>	1.80E+30	1.80E+30	Up in ES and PS
XLOC_010288	<i>2610035F20Rik</i>	-1.18	-1.32	Down in ES and PS
XLOC_006301	<i>3110039M20Rik,Foxg1</i>	1.97	3.11	Up in ES and PS
XLOC_003528	<i>4930403D09Rik</i>	1.80E+30	1.80E+30	Up in ES and PS
XLOC_022840	<i>4930465A12Rik</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_008224	<i>4930558J22Rik</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_003190	<i>4930564G21Rik</i>	-0.18	-1.80E+30	Down in ES and PS
XLOC_007544	<i>4930586N03Rik</i>	-0.58	-1.35	Down in ES and PS
XLOC_000655	<i>4930596I21Rik</i>	1.80E+30	1.80E+30	Up in ES and PS
XLOC_015286	<i>4933413C19Rik</i>	1.84	0.93	Up in ES and PS
XLOC_025990	<i>4933425H06Rik</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_010182	<i>5S_rRNA.116</i>	-1.80E+30	-0.19	Down in ES and PS
XLOC_004171	<i>5S_rRNA.126</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_010873	<i>5S_rRNA.25</i>	-1.80E+30	-0.31	Down in ES and PS
XLOC_006147	<i>5S_rRNA.36</i>	0.29	0.11	Up in ES and PS
XLOC_011226	<i>5S_rRNA.5</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_013097	<i>5S_rRNA.58</i>	0.36	0.54	Up in ES and PS
XLOC_003096	<i>5S_rRNA.61</i>	-1.80E+30	-0.15	Down in ES and PS
XLOC_005540	<i>5S_rRNA.63</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_024398	<i>5S_rRNA.73</i>	1.80E+30	1.80E+30	Up in ES and PS
XLOC_001781	<i>6330403A02Rik</i>	-0.46	-0.79	Down in ES and PS
XLOC_018586	<i>7530422B04Rik</i>	-1.80E+30	-1.41	Down in ES and PS
XLOC_003688	<i>7SK.11</i>	1.80E+30	1.80E+30	Up in ES and PS



XLOC_035121	<i>7SK.113</i>	1.80E+30	1.80E+30	Down in ES and PS
XLOC_025115	<i>7SK.135</i>	0.81	0.47	Up in ES and PS
XLOC_006419	<i>7SK.171</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_010459	<i>7SK.18</i>	1.80E+30	1.80E+30	Up in ES and PS
XLOC_007425	<i>7SK.187</i>	0.14	0.07	Up in ES and PS
XLOC_008340	<i>7SK.198</i>	-0.67	-0.25	Down in ES and PS
XLOC_023638	<i>7SK.20</i>	1.80E+30	1.80E+30	Up in ES and PS
XLOC_030009	<i>7SK.213</i>	1.80E+30	1.80E+30	Up in ES and PS
XLOC_027615	<i>7SK.218</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_000498	<i>7SK.271</i>	-1.80E+30	-0.10	Down in ES and PS
XLOC_028679	<i>7SK.282</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_016782	<i>7SK.292</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_030437	<i>7SK.296</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_001228	<i>7SK.297</i>	1.80E+30	1.80E+30	Up in ES and PS
XLOC_014560	<i>7SK.306</i>	1.80E+30	1.80E+30	Up in ES and PS
XLOC_020660	<i>7SK.45</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_002168	<i>7SK.47</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_012301	<i>7SK.61</i>	0.85	0.20	Up in ES and PS
XLOC_019541	<i>7SK.62</i>	1.80E+30	1.80E+30	Up in ES and PS
XLOC_014535	<i>7SK.89</i>	-0.61	-1.29	Down in ES and PS
XLOC_025027	<i>9530056K15Rik</i>	-0.71	-1.48	Down in ES and PS
XLOC_029615	<i>A130023I24Rik</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_017620	<i>A430092G05Rik</i>	1.86	2.65	Up in ES and PS
XLOC_000378	<i>A530040E14Rik</i>	1.40	1.08	Up in ES and PS
XLOC_015806	<i>AA645442</i>	-0.32	-1.80E+30	Down in ES and PS
XLOC_006382	<i>Abhd12b</i>	-1.06	-2.87	Down in ES and PS
XLOC_023450	<i>Ablim2</i>	0.22	0.18	Up in ES and PS
XLOC_006517	<i>AC079644.2</i>	1.80E+30	1.80E+30	Up in ES and PS
XLOC_019372	<i>AC093317.1</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_019865	<i>AC111132.1</i>	1.80E+30	1.80E+30	Up in ES and PS
XLOC_030702	<i>AC116511.1</i>	1.60	1.53	Up in ES and PS
XLOC_012564	<i>AC117577.1</i>	1.80E+30	1.80E+30	Up in ES and PS
XLOC_010900	<i>AC121814.1</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_029959	<i>AC123616.1</i>	1.80E+30	1.80E+30	Up in ES and PS
XLOC_012574	<i>AC132367.1</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_020263	<i>AC140380.1</i>	1.42	1.49	Up in ES and PS
XLOC_019170	<i>AC142502.1</i>	0.41	0.23	Up in ES and PS

XLOC_002262	<i>AC152062.1</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_006637	<i>AC152063.1</i>	1.80E+30	1.80E+30	Up in ES and PS
XLOC_009889	<i>AC154575.1</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_012112	<i>AC154654.1</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_007757	<i>AC155262.1</i>	1.80E+30	1.80E+30	Up in ES and PS
XLOC_029179	<i>AC155933.1</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_007135	<i>AC159633.1</i>	-0.46	-0.64	Down in ES and PS
XLOC_030939	<i>AC163703.1</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_013128	<i>AC164314.1</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_024018	<i>AC167419.1</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_028401	<i>AC170864.1</i>	-1.80E+30	-1.89	Down in ES and PS
XLOC_032181	<i>Acad8</i>	0.27	0.40	Up in ES and PS
XLOC_004476	<i>Ace</i>	0.27	0.78	Up in ES and PS
XLOC_027973	<i>Acsm3</i>	1.01	1.00	Up in ES and PS
XLOC_016670	<i>Adra2b</i>	-1.23	-1.87	Down in ES and PS
XLOC_003354	<i>Aebp1</i>	0.68	0.70	Up in ES and PS
XLOC_018497	<i>Al646519</i>	1.80E+30	1.80E+30	Up in ES and PS
XLOC_025818	<i>Aicda</i>	0.87	2.07	Up in ES and PS
XLOC_001206	<i>Akr1cl</i>	-2.88	-2.76	Down in ES and PS
XLOC_021459	<i>AL606976.1</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_034083	<i>AL672284.1</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_033676	<i>AL732460.1</i>	1.80E+30	1.80E+30	Up in ES and PS
XLOC_015770	<i>AL732590.2</i>	2.21	1.08	Up in ES and PS
XLOC_015591	<i>AL772216.17</i>	-0.37	-1.80E+30	Down in ES and PS
XLOC_015561	<i>AL772216.24</i>	-1.22	-1.80E+30	Down in ES and PS
XLOC_015528	<i>AL772216.26</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_015597	<i>AL772216.36</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_015585	<i>AL772216.38</i>	-2.25	-1.80E+30	Down in ES and PS
XLOC_015579	<i>AL772216.41</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_015556	<i>AL772216.44</i>	-1.00	-1.80E+30	Down in ES and PS
XLOC_015568	<i>AL772216.46</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_018303	<i>AL845466.1</i>	-1.03	-1.80E+30	Down in ES and PS
XLOC_020579	<i>AL928542.1</i>	1.80E+30	1.80E+30	Up in ES and PS
XLOC_017501	<i>AL954388.1</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_033998	<i>Alas2</i>	2.00	0.66	Up in ES and PS
XLOC_031672	<i>Aldh1a2</i>	1.90	1.53	Up in ES and PS
XLOC_024835	<i>Aldh2</i>	0.42	0.35	Up in ES and PS

XLOC_016417	<i>Alx4</i>	0.90	1.27	Up in ES and PS
XLOC_023848	<i>Ankrd13a</i>	0.43	0.27	Up in ES and PS
XLOC_010545	<i>Apol6</i>	-0.86	-1.30	Down in ES and PS
XLOC_000303	<i>Apol7d</i>	0.41	1.68	Up in ES and PS
XLOC_015994	<i>Arhgap15</i>	0.58	0.70	Up in ES and PS
XLOC_003923	<i>Asgr1</i>	2.10	1.76	Up in ES and PS
XLOC_029524	<i>Atp2a1</i>	-2.12	-3.12	Down in ES and PS
XLOC_012055	<i>AU015336</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_004602	<i>BC018473</i>	2.98	2.56	Up in ES and PS
XLOC_012563	<i>BC028777</i>	-1.77	-1.67	Down in ES and PS
XLOC_014633	<i>BC048609</i>	2.04	2.11	Up in ES and PS
XLOC_033383	<i>Bgn</i>	0.60	0.48	Up in ES and PS
XLOC_009899	<i>Bmp4</i>	0.98	0.73	Up in ES and PS
XLOC_018807	<i>Bmp7</i>	0.71	0.67	Up in ES and PS
XLOC_000480	<i>Bok</i>	-0.45	-0.81	Down in ES and PS
XLOC_018173	<i>BX813309.1</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_025790	<i>Cacna2d4</i>	-0.50	-0.65	Down in ES and PS
XLOC_026105	<i>Cadps2</i>	0.39	0.23	Up in ES and PS
XLOC_019438	<i>Casq2</i>	-0.51	-0.93	Down in ES and PS
XLOC_023480	<i>Cc2d2a</i>	0.31	0.29	Up in ES and PS
XLOC_025176	<i>Ccdc136</i>	-0.27	-0.59	Down in ES and PS
XLOC_032042	<i>Ccr9,RP24-298N7.1</i>	-0.81	-0.87	Down in ES and PS
XLOC_000758	<i>Cd247,Gm16565</i>	-0.80	-0.92	Down in ES and PS
XLOC_014094	<i>Cd74</i>	0.80	1.04	Up in ES and PS
XLOC_030390	<i>Cdh1</i>	3.00	2.08	Up in ES and PS
XLOC_029708	<i>Cdkn1c</i>	0.47	0.63	Up in ES and PS
XLOC_001540	<i>Cfh</i>	0.64	0.49	Up in ES and PS
XLOC_001538	<i>Cfhr2,Gm16332</i>	0.61	0.63	Up in ES and PS
XLOC_020686	<i>Cga</i>	5.25	4.10	Up in ES and PS
XLOC_032510	<i>Cgnl1</i>	0.34	0.36	Up in ES and PS
XLOC_014671	<i>Chrm1</i>	0.36	0.63	Up in ES and PS
XLOC_004248	<i>Col1a1</i>	0.59	0.50	Up in ES and PS
XLOC_025102	<i>Col1a2</i>	0.56	0.47	Up in ES and PS
XLOC_002916	<i>Col6a1</i>	0.63	0.62	Up in ES and PS
XLOC_002915	<i>Col6a2</i>	0.94	0.69	Up in ES and PS
XLOC_024076	<i>Cops6</i>	0.43	0.26	Up in ES and PS
XLOC_029580	<i>Cox6a2</i>	-1.09	-1.22	Down in ES and PS

XLOC_018970	<i>Cp</i>	0.41	0.34	Up in ES and PS
XLOC_025736	<i>Cpne9</i>	-0.67	-0.77	Down in ES and PS
XLOC_019215	<i>Crabp2</i>	2.16	1.70	Up in ES and PS
XLOC_008625	<i>Crhbp</i>	0.68	0.44	Up in ES and PS
XLOC_029487	<i>Crym</i>	1.92	1.97	Up in ES and PS
XLOC_011090	<i>Csf2rb2</i>	0.48	0.64	Up in ES and PS
XLOC_031759	<i>CT030259.1</i>	-0.46	-0.34	Down in ES and PS
XLOC_001963	<i>Ctgf</i>	0.65	0.46	Up in ES and PS
XLOC_000246	<i>Ctla4</i>	1.97	1.91	Up in ES and PS
XLOC_027697	<i>Ctsc</i>	0.52	0.45	Up in ES and PS
XLOC_023569	<i>Cwh43</i>	-0.86	-1.32	Down in ES and PS
XLOC_013748	<i>Cyp1b1</i>	0.57	0.67	Up in ES and PS
XLOC_026497	<i>Cyp26b1</i>	0.48	0.47	Up in ES and PS
XLOC_027253	<i>Cyp2f2</i>	3.39	2.20	Up in ES and PS
XLOC_002134	<i>D630028G08Rik</i>	-0.50	-0.72	Down in ES and PS
XLOC_002395	<i>Dcn</i>	0.70	0.51	Up in ES and PS
XLOC_023570	<i>Dcun1d4</i>	0.49	0.25	Up in ES and PS
XLOC_021471	<i>Dlgap3</i>	-0.32	-0.49	Down in ES and PS
XLOC_032147	<i>Dock6</i>	0.53	0.42	Up in ES and PS
XLOC_007673	<i>Dsp</i>	0.88	1.54	Up in ES and PS
XLOC_001665	<i>Dusp27</i>	-0.82	-1.31	Down in ES and PS
XLOC_016653	<i>Dut</i>	1.80E+30	1.80E+30	Up in ES and PS
XLOC_003476	<i>Efemp1</i>	0.58	0.44	Up in ES and PS
XLOC_030530	<i>Efnb2</i>	0.35	0.42	Up in ES and PS
XLOC_024948	<i>Emid2</i>	-0.40	-0.59	Down in ES and PS
XLOC_011251	<i>Endou</i>	-1.54	-1.98	Down in ES and PS
XLOC_010944	<i>Enpp2</i>	0.40	0.81	Up in ES and PS
XLOC_005635	<i>Epn3</i>	-0.38	-0.41	Down in ES and PS
XLOC_000745	<i>F5</i>	1.02	3.91	Up in ES and PS
XLOC_014120	<i>F730048M01Rik</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_026180	<i>Fam180a</i>	1.67	1.07	Up in ES and PS
XLOC_012393	<i>Fam3b</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_005109	<i>Fat2</i>	1.30	1.37	Up in ES and PS
XLOC_024255	<i>Fbxl13</i>	-0.78	-1.42	Down in ES and PS
XLOC_024962	<i>Fbxo24,Pcolce</i>	0.60	0.87	Up in ES and PS
XLOC_024422	<i>Fgfbp1</i>	2.34	1.68	Up in ES and PS
XLOC_029923	<i>Fgfr1</i>	0.40	0.27	Up in ES and PS

XLOC_001639	<i>Fmo2</i>	0.63	0.77	Up in ES and PS
XLOC_000611	<i>Fmod</i>	1.68	1.48	Up in ES and PS
XLOC_001233	<i>Fn1</i>	0.66	0.39	Up in ES and PS
XLOC_030190	<i>Frem3</i>	-0.54	-0.75	Down in ES and PS
XLOC_025166	<i>Fscn3</i>	0.77	0.46	Up in ES and PS
XLOC_018161	<i>Fshb</i>	3.08	2.35	Up in ES and PS
XLOC_023213	<i>Gabrd</i>	-1.06	-2.06	Down in ES and PS
XLOC_001337	<i>Gbx2</i>	-1.53	-2.18	Down in ES and PS
XLOC_016580	<i>Gchfr</i>	0.67	0.79	Up in ES and PS
XLOC_005918	<i>Gh</i>	5.06	5.48	Up in ES and PS
XLOC_024761	<i>Git2</i>	0.32	0.30	Up in ES and PS
XLOC_006457	<i>Gm10006</i>	-1.80E+30	-0.09	Down in ES and PS
XLOC_023496	<i>Gm10025</i>	-0.36	-1.08	Down in ES and PS
XLOC_031173	<i>Gm10106</i>	-2.44	-1.73	Down in ES and PS
XLOC_008321	<i>Gm10129</i>	1.80E+30	1.80E+30	Up in ES and PS
XLOC_031215	<i>Gm10706</i>	1.80E+30	1.80E+30	Up in ES and PS
XLOC_031170	<i>Gm10718</i>	-2.10	-1.60	Down in ES and PS
XLOC_019853	<i>Gm10728</i>	1.80E+30	1.80E+30	Up in ES and PS
XLOC_018110	<i>Gm10800</i>	-1.40	-1.33	Down in ES and PS
XLOC_016436	<i>Gm10801</i>	-1.33	-1.66	Down in ES and PS
XLOC_016415	<i>Gm10804</i>	-0.70	-1.80E+30	Down in ES and PS
XLOC_028558	<i>Gm10935</i>	1.80E+30	1.80E+30	Up in ES and PS
XLOC_003337	<i>Gm11032</i>	1.80E+30	1.80E+30	Up in ES and PS
XLOC_008730	<i>Gm11041</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_031169	<i>Gm11167</i>	-1.83	-1.72	Down in ES and PS
XLOC_005487	<i>Gm11198</i>	1.22	0.57	Up in ES and PS
XLOC_005488	<i>Gm11199</i>	-1.80E+30	-0.15	Down in ES and PS
XLOC_021016	<i>Gm11252</i>	-1.80E+30	-0.06	Down in ES and PS
XLOC_007545	<i>Gm11334</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_007571	<i>Gm11343</i>	0.08	0.82	Up in ES and PS
XLOC_008246	<i>Gm11348</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_007613	<i>Gm11366</i>	-0.26	-1.80E+30	Down in ES and PS
XLOC_005557	<i>Gm11439</i>	-0.08	-0.09	Down in ES and PS
XLOC_004188	<i>Gm11490</i>	-1.80E+30	-0.21	Down in ES and PS
XLOC_004271	<i>Gm11534</i>	1.80E+30	1.80E+30	Up in ES and PS
XLOC_000264	<i>Gm11607</i>	1.80E+30	1.80E+30	Up in ES and PS
XLOC_005943	<i>Gm11666</i>	-1.73	-1.80E+30	Down in ES and PS

XLOC_006034	<i>Gm11735,St6galnac1</i>	-2.49	-2.82	Down in ES and PS
XLOC_006062	<i>Gm11749</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_020519	<i>Gm11795</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_021919	<i>Gm11796</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_022052	<i>Gm11935</i>	1.80E+30	1.80E+30	Up in ES and PS
XLOC_020665	<i>Gm11941</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_004918	<i>Gm12102</i>	-1.80E+30	-0.71	Down in ES and PS
XLOC_003717	<i>Gm12237</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_003834	<i>Gm12283</i>	-1.53	-1.94	Down in ES and PS
XLOC_005267	<i>Gm12301</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_005271	<i>Gm12303</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_020693	<i>Gm12370</i>	1.80E+30	1.80E+30	Up in ES and PS
XLOC_022418	<i>Gm12413</i>	-1.80E+30	-0.10	Down in ES and PS
XLOC_022157	<i>Gm12454</i>	2.47	2.63	Up in ES and PS
XLOC_005189	<i>Gm12613</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_005190	<i>Gm12614</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_005191	<i>Gm12615</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_005187	<i>Gm12621</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_005188	<i>Gm12627</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_021067	<i>Gm12645</i>	-0.16	-1.80E+30	Down in ES and PS
XLOC_021068	<i>Gm12652</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_022556	<i>Gm12720</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_021256	<i>Gm12806</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_021273	<i>Gm12824</i>	0.92	0.93	Up in ES and PS
XLOC_021307	<i>Gm12950</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_021681	<i>Gm13037</i>	1.80E+30	1.80E+30	Up in ES and PS
XLOC_021853	<i>Gm13134</i>	-1.80E+30	-0.60	Down in ES and PS
XLOC_023116	<i>Gm13144</i>	-1.80E+30	-0.66	Down in ES and PS
XLOC_021764	<i>Gm13147</i>	-0.51	-0.90	Down in ES and PS
XLOC_023112	<i>Gm13149</i>	1.80E+30	1.80E+30	Up in ES and PS
XLOC_021753	<i>Gm13150</i>	1.80E+30	1.80E+30	Up in ES and PS
XLOC_021755	<i>Gm13153</i>	-1.02	-0.34	Down in ES and PS
XLOC_023110	<i>Gm13165</i>	1.80E+30	1.80E+30	Up in ES and PS
XLOC_021748	<i>Gm13170</i>	-3.58	-4.37	Down in ES and PS
XLOC_017255	<i>Gm13185</i>	-1.80E+30	-0.23	Down in ES and PS
XLOC_015496	<i>Gm13189</i>	0.38	0.19	Up in ES and PS
XLOC_017283	<i>Gm13388</i>	1.80E+30	1.80E+30	Up in ES and PS

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XLOC_017556	<i>Gm13407</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_015739	<i>Gm13415</i>	-3.52	-2.31	Down in ES and PS
XLOC_015991	<i>Gm13463</i>	-0.12	-0.05	Down in ES and PS
XLOC_016012	<i>Gm13510</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_016032	<i>Gm13541</i>	-1.20	-0.79	Down in ES and PS
XLOC_017680	<i>Gm13557</i>	1.80E+30	1.80E+30	Up in ES and PS
XLOC_016062	<i>Gm13560</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_017703	<i>Gm13565</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_015971	<i>Gm13591</i>	2.39	2.78	Up in ES and PS
XLOC_016162	<i>Gm13664</i>	-1.80E+30	-0.23	Down in ES and PS
XLOC_016169	<i>Gm13708</i>	1.80E+30	1.80E+30	Up in ES and PS
XLOC_018074	<i>Gm13780</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_016402	<i>Gm13786</i>	1.80E+30	1.80E+30	Up in ES and PS
XLOC_016418	<i>Gm13818</i>	1.80E+30	1.80E+30	Up in ES and PS
XLOC_023862	<i>Gm13832</i>	2.18	1.95	Up in ES and PS
XLOC_016208	<i>Gm13944</i>	-0.38	-0.58	Down in ES and PS
XLOC_016543	<i>Gm13972</i>	-1.80E+30	-0.53	Down in ES and PS
XLOC_016485	<i>Gm13992</i>	-0.91	-1.80E+30	Down in ES and PS
XLOC_016680	<i>Gm14009</i>	-1.80E+30	-2.64	Down in ES and PS
XLOC_018361	<i>Gm14012</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_016695	<i>Gm14024</i>	-1.80E+30	-0.86	Down in ES and PS
XLOC_016602	<i>Gm14087</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_016758	<i>Gm14209</i>	-0.15	-0.73	Down in ES and PS
XLOC_029506	<i>Gm14389</i>	1.80E+30	1.80E+30	Up in ES and PS
XLOC_028005	<i>Gm14422</i>	-0.23	-0.12	Down in ES and PS
XLOC_023876	<i>Gm14507</i>	-1.80E+30	-0.53	Down in ES and PS
XLOC_034639	<i>Gm14734</i>	0.39	0.45	Down in ES and PS
XLOC_033493	<i>Gm14764</i>	2.03	0.44	Up in ES and PS
XLOC_033503	<i>Gm14775</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_033542	<i>Gm14798</i>	2.01	1.80	Up in ES and PS
XLOC_033580	<i>Gm14832</i>	1.80E+30	1.80E+30	Up in ES and PS
XLOC_033402	<i>Gm14846</i>	1.80E+30	1.80E+30	Up in ES and PS
XLOC_034294	<i>Gm14884</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_033756	<i>Gm14927</i>	2.73	2.03	Up in ES and PS
XLOC_033861	<i>Gm14991</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_033190	<i>Gm15034</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_033823	<i>Gm15154</i>	-1.80E+30	-0.66	Down in ES and PS

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XLOC_002768	<i>Gm15200</i>	1.80E+30	1.80E+30	Up in ES and PS
XLOC_034138	<i>Gm15239</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_034141	<i>Gm15240</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_014384	<i>Gm15336</i>	-0.21	-0.83	Down in ES and PS
XLOC_030776	<i>Gm15355</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_000432	<i>Gm15368</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_000431	<i>Gm15371</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_000433	<i>Gm15376</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_030449	<i>Gm15395</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_029170	<i>Gm15412</i>	0.13	0.76	Up in ES and PS
XLOC_012922	<i>Gm15556</i>	1.80E+30	1.80E+30	Up in ES and PS
XLOC_025700	<i>Gm15576</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_019697	<i>Gm15578</i>	1.80E+30	1.80E+30	Up in ES and PS
XLOC_001552	<i>Gm15584</i>	-1.80E+30	-0.50	Down in ES and PS
XLOC_013327	<i>Gm15597</i>	-1.80E+30	-0.19	Down in ES and PS
XLOC_032168	<i>Gm15600</i>	1.80E+30	1.80E+30	Up in ES and PS
XLOC_001573	<i>Gm15618</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_002152	<i>Gm15647</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_023452	<i>Gm15652</i>	-0.36	-0.74	Down in ES and PS
XLOC_012142	<i>Gm15665</i>	-0.61	-1.80E+30	Down in ES and PS
XLOC_025989	<i>Gm15685</i>	1.80E+30	1.80E+30	Up in ES and PS
XLOC_023274	<i>Gm15733</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_000025	<i>Gm15818</i>	1.80E+30	1.80E+30	Up in ES and PS
XLOC_024461	<i>Gm15823</i>	-0.13	-0.62	Down in ES and PS
XLOC_012278	<i>Gm15828</i>	-0.21	-0.54	Down in ES and PS
XLOC_026470	<i>Gm15864</i>	1.80E+30	1.80E+30	Up in ES and PS
XLOC_030056	<i>Gm15882</i>	1.80E+30	1.80E+30	Up in ES and PS
XLOC_006891	<i>Gm15902</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_010398	<i>Gm15942</i>	0.62	0.34	Up in ES and PS
XLOC_013240	<i>Gm15947</i>	-1.80E+30	-1.41	Down in ES and PS
XLOC_023577	<i>Gm15984</i>	-1.53	-0.17	Down in ES and PS
XLOC_024731	<i>Gm15988</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_023775	<i>Gm16007</i>	-0.22	-0.12	Down in ES and PS
XLOC_000382	<i>Gm16028</i>	3.83	0.26	Up in ES and PS
XLOC_032271	<i>Gm16095</i>	1.80E+30	1.80E+30	Up in ES and PS
XLOC_008493	<i>Gm16134</i>	-1.80E+30	-3.02	Down in ES and PS
XLOC_014230	<i>Gm16147</i>	-1.80E+30	-0.21	Down in ES and PS



XLOC_029977	<i>Gm16203</i>	0.65	0.54	Up in ES and PS
XLOC_032468	<i>Gm16218</i>	-1.80E+30	-0.20	Down in ES and PS
XLOC_019682	<i>Gm16231</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_032612	<i>Gm16262</i>	1.80E+30	1.80E+30	Up in ES and PS
XLOC_002343	<i>Gm16270,Gm16280</i>	1.80E+30	1.80E+30	Up in ES and PS
XLOC_015442	<i>Gm16298</i>	0.99	2.36	Up in ES and PS
XLOC_025868	<i>Gm16303</i>	-1.80E+30	-1.42	Down in ES and PS
XLOC_010491	<i>Gm16308</i>	1.80E+30	1.80E+30	Up in ES and PS
XLOC_009490	<i>Gm16331</i>	0.51	0.41	Up in ES and PS
XLOC_018941	<i>Gm16337</i>	-1.80E+30	-0.16	Down in ES and PS
XLOC_030723	<i>Gm16351</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_030002	<i>Gm16352,Sorbs2</i>	0.22	0.27	Up in ES and PS
XLOC_008821	<i>Gm16542</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_026698	<i>Gm16556</i>	1.17	0.66	Up in ES and PS
XLOC_025254	<i>Gm16563</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_014984	<i>Gm16745</i>	-0.07	-0.50	Down in ES and PS
XLOC_023986	<i>Gm16868</i>	0.38	0.40	Up in ES and PS
XLOC_032049	<i>Gm16869</i>	-1.96	-1.58	Down in ES and PS
XLOC_000003	<i>Gm1992</i>	1.80E+30	1.80E+30	Up in ES and PS
XLOC_023668	<i>Gm2673</i>	-1.80E+30	-1.75	Down in ES and PS
XLOC_024326	<i>Gm5129</i>	1.80E+30	1.80E+30	Up in ES and PS
XLOC_035165	<i>Gm5763</i>	-0.59	-0.58	
XLOC_008268	<i>Gm6081</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_034421	<i>Gm7189</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_029016	<i>Gm7546</i>	1.80E+30	1.80E+30	Up in ES and PS
XLOC_019979	<i>Gm8813</i>	1.80E+30	1.80E+30	Up in ES and PS
XLOC_034143	<i>Gm8832</i>	1.58	0.20	Up in ES and PS
XLOC_011425	<i>Gm9961</i>	-0.19	-0.77	Down in ES and PS
XLOC_024487	<i>Gnpda2</i>	0.69	0.35	Up in ES and PS
XLOC_030304	<i>Gpr114</i>	-1.82	-2.70	Down in ES and PS
XLOC_023991	<i>Gpr133</i>	-1.10	-1.27	Down in ES and PS
XLOC_021834	<i>Gpr153</i>	-0.21	-0.28	Down in ES and PS
XLOC_024868	<i>Gpr81</i>	1.44	0.99	Up in ES and PS
XLOC_024126	<i>Grid2ip</i>	-1.13	-1.59	Down in ES and PS
XLOC_005991	<i>Grin2c</i>	-0.26	-0.34	Down in ES and PS
XLOC_020280	<i>Gstm2</i>	1.04	1.10	Up in ES and PS
XLOC_013410	<i>H2-Aa</i>	1.17	1.30	Up in ES and PS

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XLOC_012744	<i>H2-Ab1</i>	1.05	1.17	Up in ES and PS
XLOC_012745	<i>H2-Eb1</i>	0.80	0.70	Up in ES and PS
XLOC_003508	<i>Hba-a1</i>	2.24	0.83	Up in ES and PS
XLOC_003510	<i>Hba-a2</i>	2.19	0.80	Up in ES and PS
XLOC_029288	<i>Hbb-b1</i>	2.34	0.79	Up in ES and PS
XLOC_029287	<i>Hbb-b2</i>	2.37	0.82	Up in ES and PS
XLOC_022848	<i>Hpca</i>	0.18	0.20	Up in ES and PS
XLOC_024856	<i>Hpd</i>	-0.85	-0.81	Down in ES and PS
XLOC_018890	<i>Hrh3</i>	-0.39	-0.50	Down in ES and PS
XLOC_024797	<i>Hspb8</i>	0.40	0.55	Up in ES and PS
XLOC_031281	<i>Icam5</i>	0.41	0.66	Up in ES and PS
XLOC_006568	<i>Iji2711</i>	0.44	0.40	Up in ES and PS
XLOC_028155	<i>Ifitm1</i>	1.25	1.03	Up in ES and PS
XLOC_020689	<i>Ifnk</i>	-1.08	-0.13	Down in ES and PS
XLOC_029699	<i>Igf2</i>	1.05	1.24	Up in ES and PS
XLOC_028188	<i>Igf2as</i>	0.98	1.13	Up in ES and PS
XLOC_000312	<i>Igfbp2</i>	0.53	0.72	Up in ES and PS
XLOC_010773	<i>Igfbp6</i>	1.80	1.38	Up in ES and PS
XLOC_007866	<i>Irx2</i>	0.36	0.49	Up in ES and PS
XLOC_032419	<i>Islr</i>	1.05	1.03	Up in ES and PS
XLOC_017299	<i>Itih2</i>	1.27	0.84	Up in ES and PS
XLOC_016595	<i>Itpka</i>	0.49	0.79	Up in ES and PS
XLOC_002607	<i>lyd</i>	-0.97	-1.55	Down in ES and PS
XLOC_001327	<i>Kcnj13</i>	2.35	4.35	Up in ES and PS
XLOC_023581	<i>Kit</i>	0.38	0.62	Up in ES and PS
XLOC_011337	<i>Krt4</i>	1.29	1.75	Up in ES and PS
XLOC_016982	<i>Lbp</i>	0.71	1.99	Up in ES and PS
XLOC_017530	<i>Lcn2</i>	4.42	2.86	Up in ES and PS
XLOC_019590	<i>Lef1</i>	-0.67	-1.26	Down in ES and PS
XLOC_001529	<i>Lhx9</i>	-1.40	-1.74	Down in ES and PS
XLOC_023549	<i>Limch1</i>	0.30	0.22	Up in ES and PS
XLOC_026876	<i>Lmo3</i>	0.25	0.42	Up in ES and PS
XLOC_014177	<i>Loxhd1</i>	-0.90	-1.84	Down in ES and PS
XLOC_013637	<i>Lrg1</i>	2.58	1.61	Up in ES and PS
XLOC_024379	<i>Lrpap1</i>	0.32	0.25	Up in ES and PS
XLOC_025564	<i>Lrrtm1</i>	-0.47	-0.72	Down in ES and PS
XLOC_002396	<i>Lum</i>	0.68	0.71	Up in ES and PS

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XLOC_001439	<i>Lypd1</i>	0.25	0.29	Up in ES and PS
XLOC_011021	<i>Lypd2</i>	2.92	2.10	Up in ES and PS
XLOC_003171	<i>Lyz2</i>	1.12	0.59	Up in ES and PS
XLOC_010379	<i>Matn2</i>	0.42	0.52	Up in ES and PS
XLOC_029784	<i>Mcf2l</i>	0.37	0.22	Up in ES and PS
XLOC_024376	<i>Mfsd10</i>	0.44	0.33	Up in ES and PS
XLOC_004605	<i>Mgat5b</i>	-0.33	-0.27	Down in ES and PS
XLOC_026869	<i>Mgp</i>	1.16	0.88	Up in ES and PS
XLOC_014804	<i>Mir1192</i>	-1.80E+30	-0.19	Down in ES and PS
XLOC_011510	<i>Mir1224</i>	1.80E+30	1.80E+30	Up in ES and PS
XLOC_000592	<i>Mir135b</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_014253	<i>Mir1901</i>	-0.45	-1.80E+30	Down in ES and PS
XLOC_004843	<i>Mir1933</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_031038	<i>Mir328</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_006638	<i>Mir370</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_006691	<i>Mir541</i>	1.80E+30	1.80E+30	Up in ES and PS
XLOC_030216	<i>Mir709</i>	1.95	0.42	Up in ES and PS
XLOC_032789	<i>mmu-mir-2134-3.1</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_020348	<i>mmu-mir-2138.1</i>	-1.80E+30	-0.28	Down in ES and PS
XLOC_031470	<i>Mpzl2</i>	1.89	1.81	Up in ES and PS
XLOC_004469	<i>Mrc2</i>	0.61	0.57	Up in ES and PS
XLOC_028207	<i>Mrgprf</i>	1.02	1.04	Up in ES and PS
XLOC_029432	<i>Mrvi1</i>	-0.41	-0.71	Down in ES and PS
XLOC_016506	<i>Muc15</i>	-1.81	-1.55	Down in ES and PS
XLOC_014161	<i>Myo5b</i>	0.42	1.15	Up in ES and PS
XLOC_015343	<i>Myof</i>	0.74	0.82	Up in ES and PS
XLOC_015748	<i>Nelf</i>	-0.20	-0.56	Down in ES and PS
XLOC_012625	<i>Neurl1b</i>	-0.39	-0.65	Down in ES and PS
XLOC_006929	<i>Nkx2-1</i>	1.09	1.14	Up in ES and PS
XLOC_009422	<i>Nkx3-1</i>	-1.36	-1.78	Down in ES and PS
XLOC_001908	<i>Nmbr</i>	-1.09	-1.00	Down in ES and PS
XLOC_030266	<i>Nod2</i>	-0.92	-1.19	Down in ES and PS
XLOC_010445	<i>Nov</i>	1.17	0.77	Up in ES and PS
XLOC_000137	<i>Npas2</i>	-0.52	-0.78	Down in ES and PS
XLOC_010838	<i>Npr3</i>	0.61	1.00	Up in ES and PS
XLOC_024140	<i>Nptx2</i>	-0.81	-0.95	Down in ES and PS
XLOC_008582	<i>Nr2f1</i>	-0.39	-0.45	Down in ES and PS

XLOC_027093	<i>n-R5s151</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_029587	<i>n-R5s158</i>	1.80E+30	1.80E+30	Up in ES and PS
XLOC_021435	<i>n-R5s192</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_010911	<i>n-R5s39</i>	1.80E+30	1.80E+30	Up in ES and PS
XLOC_009378	<i>n-R5s47</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_006905	<i>n-R5s58</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_002206	<i>n-R5s77</i>	1.80E+30	1.80E+30	Up in ES and PS
XLOC_031638	<i>n-R5s85</i>	0.92	0.68	Up in ES and PS
XLOC_033484	<i>n-R5s9</i>	1.80E+30	1.80E+30	Up in ES and PS
XLOC_030533	<i>n-R5s95</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_000256	<i>Nrp2</i>	0.37	0.45	Up in ES and PS
XLOC_007728	<i>Ogn</i>	1.57	1.19	Up in ES and PS
XLOC_007727	<i>Omd</i>	1.23	1.55	Up in ES and PS
XLOC_006171	<i>Osr1</i>	2.13	1.57	Up in ES and PS
XLOC_001379	<i>Pam</i>	0.29	0.19	Up in ES and PS
XLOC_016446	<i>Pamr1</i>	-0.33	-0.45	Down in ES and PS
XLOC_023786	<i>Pcgf3</i>	0.53	0.32	Up in ES and PS
XLOC_021953	<i>Pdp1</i>	-0.24	-0.62	Down in ES and PS
XLOC_027774	<i>Phox2a</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_023003	<i>Pla2g5</i>	1.16	1.84	Up in ES and PS
XLOC_023209	<i>Plch2</i>	-0.60	-0.72	Down in ES and PS
XLOC_002606	<i>Plekhg1</i>	-0.62	-1.11	Down in ES and PS
XLOC_022593	<i>Podn</i>	0.89	1.25	Up in ES and PS
XLOC_006143	<i>Pomc</i>	1.54	2.12	Up in ES and PS
XLOC_014060	<i>Prdm6</i>	3.11	2.41	Up in ES and PS
XLOC_001491	<i>Prelp</i>	0.34	0.54	Up in ES and PS
XLOC_001563	<i>Prg4</i>	1.79	0.98	Up in ES and PS
XLOC_026958	<i>Prkcc</i>	-0.53	-0.65	Down in ES and PS
XLOC_009728	<i>Prkcd</i>	-1.09	-1.94	Down in ES and PS
XLOC_006403	<i>Prkch</i>	-0.61	-1.16	Down in ES and PS
XLOC_031299	<i>Prkcsh</i>	0.81	0.44	Up in ES and PS
XLOC_007586	<i>Prl</i>	5.15	6.21	Up in ES and PS
XLOC_017415	<i>Ptgds</i>	1.09	0.68	Up in ES and PS
XLOC_010123	<i>Ptk2b</i>	-0.54	-0.60	Down in ES and PS
XLOC_022275	<i>Ptpn3</i>	-0.67	-1.44	Down in ES and PS
XLOC_001423	<i>Ptpn4</i>	-0.27	-0.50	Down in ES and PS
XLOC_006101	<i>Pycr1</i>	-0.52	-0.76	Down in ES and PS

XLOC_003367	<i>Ramp3</i>	-0.95	-2.10	Down in ES and PS
XLOC_010321	<i>Ranbp3l</i>	0.95	1.17	Up in ES and PS
XLOC_005177	<i>Rasd1</i>	-0.67	-1.14	Down in ES and PS
XLOC_018241	<i>Rasgrp1</i>	-0.51	-1.02	Down in ES and PS
XLOC_024163	<i>Rasl11a</i>	-0.98	-1.67	Down in ES and PS
XLOC_031800	<i>Rbp1</i>	1.10	0.56	Up in ES and PS
XLOC_000692	<i>Rgs16</i>	-0.72	-1.57	Down in ES and PS
XLOC_030894	<i>RP23-148F13.2</i>	-0.15	-0.31	Down in ES and PS
XLOC_000541	<i>RP23-274C16.2</i>	-0.29	-1.80E+30	Down in ES and PS
XLOC_009573	<i>RP23-2H19.1</i>	1.31	1.34	Up in ES and PS
XLOC_007046	<i>RP23-315C11.6</i>	1.80E+30	1.80E+30	Up in ES and PS
XLOC_031864	<i>RP23-317M3.2</i>	0.84	0.39	Up in ES and PS
XLOC_027932	<i>RP23-34J4.1</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_026848	<i>RP23-434H14.1</i>	1.80E+30	1.80E+30	Up in ES and PS
XLOC_009575	<i>RP23-45E20.6</i>	0.31	0.74	Up in ES and PS
XLOC_009568	<i>RP24-194J8.4</i>	0.98	1.16	Up in ES and PS
XLOC_008764	<i>RP24-312N10.1</i>	1.84	0.65	Up in ES and PS
XLOC_008765	<i>RP24-312N10.2</i>	1.20	0.85	Up in ES and PS
XLOC_013828	<i>RP24-329I13.2</i>	4.13	3.79	Up in ES and PS
XLOC_013702	<i>RP24-538J1.2</i>	1.80E+30	1.80E+30	Up in ES and PS
XLOC_031566	<i>RP24-539A10.2</i>	-1.80E+30	-2.50	Down in ES and PS
XLOC_009609	<i>RP24-80K11.1</i>	-0.57	-0.61	Down in ES and PS
XLOC_011482	<i>Rtn4r</i>	-0.37	-0.73	Down in ES and PS
XLOC_004016	<i>Rtn4rl1</i>	-0.49	-0.85	Down in ES and PS
XLOC_022423	<i>Scarna8</i>	1.80E+30	1.80E+30	Up in ES and PS
XLOC_032088	<i>Scarna9</i>	1.80E+30	1.80E+30	Up in ES and PS
XLOC_032801	<i>Scn5a</i>	0.42	0.61	Up in ES and PS
XLOC_029423	<i>Scube2</i>	-0.70	-0.96	Down in ES and PS
XLOC_024115	<i>Sdk1</i>	0.30	0.50	Up in ES and PS
XLOC_032704	<i>Sema3b</i>	0.50	1.30	Up in ES and PS
XLOC_017846	<i>Serping1</i>	0.67	0.76	Up in ES and PS
XLOC_001938	<i>Sgk1</i>	0.42	1.09	Up in ES and PS
XLOC_010681	<i>Shank3</i>	-0.51	-0.74	Down in ES and PS
XLOC_019917	<i>Shox2</i>	-1.12	-1.60	Down in ES and PS
XLOC_007875	<i>Slc12a7</i>	0.68	0.48	Up in ES and PS
XLOC_011601	<i>Slc12a8</i>	-0.70	-0.77	Down in ES and PS
XLOC_018741	<i>Slc13a3</i>	0.50	0.37	Up in ES and PS

XLOC_026179	<i>Slc13a4</i>	2.29	2.98	Up in ES and PS
XLOC_015326	<i>Slc16a12</i>	0.68	0.88	Up in ES and PS
XLOC_027502	<i>Slc17a7</i>	-0.71	-0.47	Down in ES and PS
XLOC_012451	<i>Slc22a2</i>	1.62	2.14	Up in ES and PS
XLOC_014670	<i>Slc22a6</i>	1.87	1.65	Up in ES and PS
XLOC_013556	<i>Slc29a1</i>	-0.28	-0.45	Down in ES and PS
XLOC_005212	<i>Slc47a1</i>	2.91	2.01	Up in ES and PS
XLOC_025808	<i>Slc6a12</i>	2.16	1.68	Up in ES and PS
XLOC_025807	<i>Slc6a13</i>	1.14	0.91	Up in ES and PS
XLOC_032831	<i>Slc6a20a</i>	0.87	0.99	Up in ES and PS
XLOC_032830	<i>Slc6a20b</i>	0.76	1.02	Up in ES and PS
XLOC_004045	<i>Slc6a4</i>	0.96	1.32	Up in ES and PS
XLOC_027552	<i>Slc6a5</i>	0.66	1.49	Up in ES and PS
XLOC_023493	<i>Slit2</i>	0.58	0.28	Up in ES and PS
XLOC_010455	<i>SNORA11.1</i>	-0.52	-1.80E+30	Down in ES and PS
XLOC_016536	<i>SNORA11.3</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_031865	<i>SNORA17.181</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_023639	<i>SNORA17.20</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_010941	<i>SNORA17.212</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_029454	<i>SNORA17.254</i>	-0.15	-1.80E+30	Down in ES and PS
XLOC_026657	<i>SNORA17.305</i>	1.80E+30	1.80E+30	Up in ES and PS
XLOC_022824	<i>SNORA17.314</i>	0.24	0.17	Up in ES and PS
XLOC_030565	<i>SNORA17.403</i>	1.80E+30	1.80E+30	Up in ES and PS
XLOC_016432	<i>SNORA17.452</i>	1.80E+30	1.80E+30	Up in ES and PS
XLOC_032462	<i>SNORA17.572</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_001659	<i>SNORA18.5</i>	-1.10	-1.80E+30	Down in ES and PS
XLOC_015278	<i>SNORA19.2</i>	-1.11	-1.80E+30	Down in ES and PS
XLOC_015472	<i>SNORA19.3</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_032798	<i>SNORA19.5</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_006219	<i>SNORA21.2</i>	1.80E+30	1.80E+30	Up in ES and PS
XLOC_005899	<i>SNORA25.2</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_008242	<i>SNORA32.7</i>	1.80E+30	1.80E+30	Up in ES and PS
XLOC_001091	<i>SNORA33.1</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_026590	<i>SNORA36.7</i>	-1.80E+30	-0.19	Down in ES and PS
XLOC_005378	<i>SNORA38.1</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_031784	<i>SNORA4.5</i>	1.80E+30	1.80E+30	Up in ES and PS
XLOC_009464	<i>SNORA40.5</i>	1.80E+30	1.80E+30	Up in ES and PS

XLOC_007893	<i>SNORA42.11</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_018107	<i>SNORA42.19</i>	-1.80E+30	-0.13	Down in ES and PS
XLOC_031341	<i>SNORA48.9</i>	-1.80E+30	-0.20	Down in ES and PS
XLOC_025536	<i>SNORA5.3</i>	-1.80E+30	-0.62	Down in ES and PS
XLOC_030862	<i>SNORA50.1</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_030424	<i>SNORA57.1</i>	1.80E+30	1.80E+30	Up in ES and PS
XLOC_032523	<i>SNORA61.7</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_008348	<i>SNORA61.9</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_019867	<i>SNORA69.1</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_012216	<i>SNORA70.2</i>	1.80E+30	1.80E+30	Up in ES and PS
XLOC_029026	<i>SNORA70.9</i>	-1.80E+30	-0.17	Down in ES and PS
XLOC_002334	<i>SNORA73.11</i>	-1.80E+30	-0.51	Down in ES and PS
XLOC_008820	<i>SNORA73.7</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_003081	<i>SNORA79.4</i>	1.80E+30	1.80E+30	Up in ES and PS
XLOC_006647	<i>SNORD113.1</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_006640	<i>SNORD113.21</i>	1.80E+30	1.80E+30	Up in ES and PS
XLOC_006645	<i>SNORD113.9</i>	0.29	0.09	Up in ES and PS
XLOC_033393	<i>SNORD38.1</i>	1.80E+30	1.80E+30	Up in ES and PS
XLOC_003826	<i>Snord49b</i>	0.71	0.50	Up in ES and PS
XLOC_003828	<i>Snord65</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_011515	<i>Snord66</i>	1.80E+30	1.80E+30	Up in ES and PS
XLOC_001316	<i>Snord82</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_012787	<i>SNORD83.1</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_011897	<i>SNORD86.1</i>	1.80E+30	1.80E+30	Up in ES and PS
XLOC_013942	<i>snoU13.14</i>	0.46	0.41	Up in ES and PS
XLOC_024374	<i>snoU13.5</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_032089	<i>snoU2_19.1</i>	1.80E+30	1.80E+30	Up in ES and PS
XLOC_010891	<i>Snx31</i>	-2.40	-2.65	Down in ES and PS
XLOC_019302	<i>Sprr2i</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_024401	<i>Stk32b</i>	0.49	0.43	Up in ES and PS
XLOC_029534	<i>Sult1a1</i>	0.39	0.60	Up in ES and PS
XLOC_020362	<i>Synpo2</i>	-0.78	-1.74	Down in ES and PS
XLOC_016067	<i>Tanc1</i>	-0.28	-0.60	Down in ES and PS
XLOC_021599	<i>Tcea3</i>	1.28	1.45	Up in ES and PS
XLOC_017837	<i>Tfpi</i>	0.51	0.66	Up in ES and PS
XLOC_024995	<i>Tmem184a</i>	0.93	1.73	Up in ES and PS
XLOC_028240	<i>Tnnt1</i>	-2.13	-2.83	Down in ES and PS

XLOC_003152	<i>Tph2</i>	1.15	1.41	Up in ES and PS
XLOC_010566	<i>Triobp</i>	-0.32	-0.50	Down in ES and PS
XLOC_019804	<i>Trpc3</i>	-0.36	-0.53	Down in ES and PS
XLOC_014791	<i>Trpm6</i>	-0.68	-1.20	Down in ES and PS
XLOC_017109	<i>Tshz2</i>	-0.22	-0.40	Down in ES and PS
XLOC_019552	<i>U1.139</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_014282	<i>U1.177</i>	1.80E+30	1.80E+30	Up in ES and PS
XLOC_031788	<i>U1.192</i>	-0.58	-0.23	Down in ES and PS
XLOC_019240	<i>U1.30</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_002598	<i>U1.80</i>	1.80E+30	1.80E+30	Up in ES and PS
XLOC_019200	<i>U1.90</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_019923	<i>U2.36</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_030177	<i>U2.48</i>	-0.72	-1.80E+30	Down in ES and PS
XLOC_004491	<i>U3.12</i>	-1.80E+30	-0.18	Down in ES and PS
XLOC_007150	<i>U3.2</i>	-0.98	-1.80E+30	Down in ES and PS
XLOC_010497	<i>U4.20</i>	1.80E+30	1.80E+30	Up in ES and PS
XLOC_004700	<i>U4.39</i>	1.80E+30	1.80E+30	Up in ES and PS
XLOC_003680	<i>U6.113</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_016504	<i>U6.133</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_031134	<i>U6.137</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_017215	<i>U6.17</i>	-1.80E+30	-0.57	Down in ES and PS
XLOC_023811	<i>U6.217</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_021657	<i>U6.22</i>	-0.11	-0.07	Down in ES and PS
XLOC_020431	<i>U6.233</i>	1.80E+30	1.80E+30	Up in ES and PS
XLOC_005354	<i>U6.276</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_008345	<i>U6.298</i>	1.80E+30	1.80E+30	Up in ES and PS
XLOC_032725	<i>U6.345</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_013769	<i>U6.363</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_013458	<i>U6.372</i>	-0.06	-0.54	Down in ES and PS
XLOC_000475	<i>U6.4</i>	-0.07	-0.47	Down in ES and PS
XLOC_013161	<i>U6.464</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_017261	<i>U6.465</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_006151	<i>U6.467</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_014574	<i>U6.477</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_012468	<i>U6.503</i>	-1.80E+30	-0.24	Down in ES and PS
XLOC_011083	<i>U6.543</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_030875	<i>U6.586</i>	1.80E+30	1.80E+30	Up in ES and PS



XLOC_031091	<i>U6.6</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_022106	<i>U6.619</i>	-1.80E+30	-0.11	Down in ES and PS
XLOC_002361	<i>U6.622</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_019098	<i>U6.66</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_009088	<i>U6.700</i>	1.80E+30	1.80E+30	Up in ES and PS
XLOC_029509	<i>U6.710</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_005725	<i>U6.718</i>	1.80E+30	1.80E+30	Up in ES and PS
XLOC_015388	<i>U6.720</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_014602	<i>U6.757</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_023739	<i>U6.79</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_022829	<i>U6.821</i>	2.89	1.82	Up in ES and PS
XLOC_018294	<i>U6.829</i>	1.80E+30	1.80E+30	Up in ES and PS
XLOC_014456	<i>U6.855</i>	-1.80E+30	-0.19	Down in ES and PS
XLOC_010087	<i>U6.874</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_002008	<i>U6atac.3</i>	1.80E+30	1.80E+30	Up in ES and PS
XLOC_002543	<i>U8.3</i>	-1.80E+30	-1.80E+30	Down in ES and PS
XLOC_031271	<i>Ubl5</i>	1.08	0.36	Up in ES and PS
XLOC_005269	<i>Usp43</i>	-0.98	-1.24	Down in ES and PS
XLOC_020227	<i>Vangl1</i>	-0.36	-0.45	Down in ES and PS
XLOC_019515	<i>Vav3</i>	-0.37	-0.82	Down in ES and PS
XLOC_031987	<i>Vill</i>	0.41	0.48	Up in ES and PS
XLOC_015657	<i>Vim</i>	0.46	0.40	Up in ES and PS
XLOC_004079	<i>Vtn</i>	0.35	0.25	Up in ES and PS
XLOC_025866	<i>Vwf</i>	1.06	0.68	Up in ES and PS
XLOC_000331	<i>Wnt6</i>	1.70	1.13	Up in ES and PS
XLOC_003773	<i>Wnt9a</i>	-0.83	-1.00	Down in ES and PS
XLOC_005896	<i>Wnt9b</i>	-1.15	-2.16	Down in ES and PS
XLOC_025368	<i>Y_RNA.6</i>	1.52	1.14	Up in ES and PS
XLOC_026245	<i>Y_RNA.9</i>	1.45	1.10	Up in ES and PS
XLOC_000118	<i>Zap70</i>	-0.62	-0.69	Down in ES and PS
XLOC_005820	<i>Zfp385c</i>	-1.03	-1.10	Down in ES and PS
XLOC_030954	<i>Zfp423</i>	-0.22	-0.30	Down in ES and PS
XLOC_032608	<i>Zic1</i>	-0.92	-1.41	Down in ES and PS
XLOC_009553	<i>Zic2</i>	-0.65	-0.88	Down in ES and PS
XLOC_031773	<i>Zic4</i>	-0.85	-0.79	Down in ES and PS
XLOC_010287	<i>Zic5</i>	-0.85	-0.71	Down in ES and PS

ES, emotional stress; PS, physical stress.

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